CLAIMS

1. Foodstuff made of starch, flour, semolina and the like, characterized in that

   a) the foodstuff has at least one phase or matrix consisting entirely or partially of a starch network; and

   b) at least one component of the starch network is present at least once in a state occupied by most of the released crystallization potential while manufacturing the foodstuff, in particular in an at least partially amorphous state, preferably dissolved or plasticized; and

   c) the starch network is formed by at least one networkable starch component (NS) and at least one existing starch component (VS) at least in part via the heterocrystallization of NS and VS.

2. Foodstuff according to claim 1, characterized in that the matrix consisting entirely or partially of starch gel contains at least one disperse phase, in particular that it contains at least one disperse phase consisting of at least one VS component.

3. Foodstuff according to claim 2, characterized in that a portion of the starch in the matrix comes from the disperse phase.

4. Foodstuff according to one of the preceding claims, characterized in that

a) the foodstuff has at least one NS component, which is present at least once in a state occupied by most of the released crystallization potential while manufacturing the foodstuff, in particular at an at least partially amorphous state, preferably dissolved or plasticized; and

b) a state in which the NS component is mixed in with at least one VS component in a molecularly disperse manner while manufacturing the foodstuff; and in particular

c) network formation of this mixture sets in prior to the thermodynamically preferred separation.

5. Foodstuff according to one of the preceding claims, characterized in that, in addition to the at least one NS component, the foodstuff has at least one VS component, which is not necessary present mixed with the at least one NS component in a molecularly disperse manner during manufacture, but at least a portion thereof can preferably be, wherein in particular this NS component remains in a nearly native state during the manufacturing process, or assumes any state between this state and the state of complete destructurization.

6. Foodstuff according to one of the preceding claims, characterized in that, after manufactured, the foodstuff has a starch network comprised of macromolecules of the at least one NS component and the at least one VS component, wherein

a) the percent by weight of the network in the foodstuff ranges from 0.1 to 100 % db; and

b) the percent by weight of the NS component(s) in the foodstuff ranges from 0.03 to 99 % db; and

a) the percent by weight of the NS component(s) in the network ranges from 0.03 to 99 % db; and in particular

b) the network is coupled with at least one at least partially gelatinized or at least partially plasticized VS component.

7. Method for manufacturing a foodstuff according to one of the preceding claims, characterized in that

a) the foodstuff has at least one NS component, which is present at least once in a state occupied by most of the released crystallization potential while manufacturing the foodstuff,

b) the foodstuff has at least one first VS component VS1, if necessary, that was dissolved or plasticized; and

c) the foodstuff has at least one second VS component VS2, if necessary; and

d) a state is reached while manufacturing the foodstuff in which the NS component is mixed in a molecularly disperse manner with at least a portion of at least one of the components VS1 and VS2; and

e) network formation is initiated while or after molding the foodstuff, wherein the network elements of the starch network are formed by crystallites, which are formed at least partially via heterocrystallization of the at least one NS component with at least part of at least one of the components VS1 and VS2; and

f) conditioning is executed after molding, if necessary; and

g) a drying process is executed after molding, if necessary.

8. Foodstuff according to one of the preceding claims, characterized in that proteins, in particular gluten or other polysaccharides than starch are contained in the network or matrix consisting entirely or partially of starch, wherein this phase consists in particular of interpenetrating networks.

9. Foodstuff according to one of the preceding claims, characterized in that, in the absence of nuclei in excess water at RT after 1d, in particular after 3d, preferably after 7 d, most preferably after 14 d, the foodstuff

a) has a strength σ in MPa in a tensile test of > 0.1, in particular > 0.3, preferably > 0.7, most preferably > 1.1; and/or

b) an elasticity modulus E in MPa in a tensile test of > 0.5, in particular > 1, preferably > 3, most preferably > 5; and/or

c) a water solubility S in % db of < 3, in particular < 1, preferably < 0.5, most preferably < 0.3.

10. Foodstuff according to one of the preceding claims, characterized in that, because of the starch network, the foodstuff has a portion of resistant starch in [%] of > 3, preferably > 5, in particular > 7, most preferably > 10.

11. Foodstuff according to one of the preceding claims, characterized in that, because of the starch network, the foodstuff has a glyceamic index reduced by a factor of < 0.7, preferably < 0.5, in particular < 0.3, most preferably < 0.1 contrasted to a comparable conventional foodstuff.

12. Foodstuff according to one of the preceding claims, characterized in that the foodstuff is present as a pasta product, in particular as dry goods, ready made fresh goods, in instant form or canned goods; as cereals, in particular as cereal flakes; as a snack; or as pastry.

13. Foodstuff according to one of the preceding claims, characterized in that, in the absence of any admixed eggs or egg constituents, the pasta products in boiling water have

a) a water solubility S of < 5 %, in particular < 3 %, preferably < 2 %, most preferably < 1 %, after 15 min; and/or

b) a chewing consistency B in grams of > 200, in particular > 300, preferably > 400, most preferably > 500 after 6 min; and/or

c) a chewing consistency B in grams of > 100, in particular >150, preferably >200, most preferably >300 after 10 m

d) a chewing consistency B in grams of > 50, in particular > 70, preferably > 100, most preferably > 130 after 30 m

14. Foodstuff or foodstuff additive according to one of the preceding claims, characterized in that the foodstuff or foodstuff additive is used as a gelatinization agent, in particular consisting of an amorphous molecularly disperse mixture of at least one NS and at least one VS, wherein in particular this mixture is present in a dried form, preferably in spray dried or freeze dried form, and is used as a binding and thickening agent for foodstuffs.